

Table 2.1-1
Chemical-Specific ARARs for Remedial Action
Portland Harbor Superfund Site
Portland, Oregon

Medium	Regulation/Citation	Criterion/Standard	Comments
Protection of surface water	Clean Water Act, 33 USC 1313 and 1314 (Sections 303 and 304). Most recent 304(a) list of recommended water quality criteria, as updated up to issuance of the ROD	Under CWA Section 304(a), EPA develops recommended water quality criteria for water quality programs established by states. Two kinds of water quality criteria are developed: one for protection of human health, and one for protection of aquatic life. CWA §303 requires States to develop water quality standards based on Federal water quality criteria to protect existing and attainable use or uses (e.g., recreation, public water supply) of the receiving waters.	The most recent 304(a) recommended water quality criteria are relevant and appropriate for cleanup standards for surface water and contaminated groundwater discharging to surface water if more stringent than promulgated state criteria. Relevant and Appropriate as criterion to apply to limit short-term impacts from dredging and capping if more stringent than promulgated state criteria. Relevant and Appropriate as criterion to apply to point source discharges that may occur in implementing the remedy, if applicable.
Protection of potential drinking water sources	Safe Drinking Water Act, 42 USC 300f, 40 CFR Part 141, Subpart O, App. A. 40 CFR Part 143	Establishes Maximum Contaminant Level Goals (MCLGs) and Maximum Contaminant Levels (MCLs) to protect human health from contaminants in drinking water.	Relevant and Appropriate as cleanup standards for groundwater and surface water at Portland Harbor, which are potential drinking water sources.
Protection of potential drinking water sources	EPA Regional Screening Level (RSL) for Groundwater. Office of Superfund Remediation and Technology Innovation, Assessment and Remediation Division. November 2015.	Establishes acceptable risk levels for human health at 1x10 ⁻⁶ for individual carcinogens or hazard quotient (HQ) of 1 for individual contaminants in drinking water. They are risk-based concentrations derived from standardized equations combining exposure information assumptions with EPA toxicity data.	To be considered for establishing PRGS for contaminants of concern where MCLGs and MCLs are not established.
Measure of protectiveness of human health and the environment in all media	Oregon Environmental Cleanup Law ORS 465.315(b)(A). Oregon Hazardous Substance Remedial Action Rules OAR 340- 122- 0040(2)(a) and (c), 0115(2-4).	Sets standards for degree of cleanup required for hazardous substances. Establishes acceptable risk levels for human health at 1x10 ⁻⁶ for individual carcinogens, 1x10 ⁻⁵ for multiple carcinogens, and Hazard Index of 1 for noncarcinogens.	Applicable standards for the final selected remedy to achieve these human health carcinogen and noncarcinogen risk levels by implementation of dredging, capping, enhanced natural recovery, monitored natural recovery, on or off-site disposal, implementation of institutional controls and other response actions set forth in the ROD.
Protection of surface water	Water Pollution Control Act ORS 468B.048. State-wide Numeric water quality criteria set forth in OAR Part 340, Division 41, including, Toxic Substances criterion at OAR Part 340- 41-0033 (Tables 30 and 40), and Designated Uses for the Willamette Basin and Numeric Water Quality Criteria specified for the Willamette Basin at OAR 340-041-340 and 340-041-0345	DEQ is authorized to administer and enforce CWA program in Oregon. The state has promulgated numeric water criteria, both criteria that applies state-wide and specific Willamette Basin criteria promulgated to protect Willamette Basin designated beneficial uses.	Oregon's numeric toxics water quality standards (Tables 30 and 40) are applicable requirements as cleanup standards for surface water to the extent they are more stringent than Clean Water Act 304(a) recommended criterion. All state promulgated numeric water quality criteria are applicable standards of control on discharges to state waters during the implementation of remedial actions, such as setting limits on short-term impacts from dredging and capping, and limits on point source discharges that may occur in implementing the remedy. Oregon's numeric criteria are relevant and appropriate as cleanup standards for groundwater discharging to surface water.